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Dissertation

on the

Marasmus of

children

by

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Marasmus, or general wasting of the body has within a few years, been ascertained to depend on derangement of some one of the chylo-poietic viscera, or of the alimentary canal. Ayre in his excellent treatise on this complaint observes "if the views which I have taken be correct there is no difference between the Marasmus of children, and that disorder of adults, which may strictly be denominated Bilious, either in the nature, the causes, or the means of cure."

This author, therefore, considers Marasmus and Bilious as synonymous terms, and comprehends under them every variety of this disorder. adopting his plan I divide Marasmus into two parts, acute and chronic.

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The chronic is distinguished by a morbidly
craving appetite, and not accompanied by
much fever, but in the acute form there
is loss of appetite, and a considerable de-
gree of fever.

Marasmus is met with in infancy, child-
hood, and adult age; I, however, shall
treat of it only as it occurs in infants, and
children, limiting the age of the former to
two years, and that of the latter to four
turn years.

In infants this complaint is at first attend-
ed with languor, a disposition to sleep dur-
ing the day, and with restlessness at night.
It takes food in the commencement with
readiness, and may be soothed by it, but
in a short time all appetite is lost, it
cries, and becomes extremely restless. The
breathing towards night, is quicker, and

lender, attended by stupor, frequent startings,
heat of body, and coldness of the extremities
of the infant be several months of age,
and of a vigorous constitution, its bowels
will frequently become loose, and the ap-
petite continue natural. The stools vary
much, being sometimes of a yellowish green
colour, and curdy, and at other times parti-
coloured, and slimy. The flesh is flabby,
the tongue white, and not unfrequently
covered with aphthae. bough, a rash about
the body, and eruptions about the nose,
mouth, and ears are common.

Before long, a considerable increase of
fever ensues, every kind of food is loath-
ed, the restlessness is greater; there is stu-
por, extreme emaciation, convulsions,
and lastly, death.

The chronic stage of Marasmus in children

comes on insidiously: There being at first merely an increase of appetite, a partial loss of animation, & a reluctance to rise at its usual hours. It soon loses all desire to engage in its wonted amusements, complains of chilliness, and has pains in the knees, and thighs. The breath becomes foetid; the tongue is white in the morning before eating; and the bowels are either regular, or loose. In a short time it is faint, drowsy, always disposed to sleep during the day, and when sleeping starts, and cries out as if from fear. A spasmodic cough towards evening is a common symptom. The appetite is good or bad, as the bowels are loose, or costive, the stools are slimy and greenish; the skin dry; the pulse hard and quick, especially, during sleep; the strength fails, the flesh gradually wastes, as

the case advances, and the appetite, of
the frequent variations from good to bad,
is at last completely destroyed.

An exposure to cold will now easily
develop the acute form of the disease,
which is now marked with symptoms
of considerable febrile excitement, and
particularly at night, the child at this
time is restless, has a hot, and dry skin,
hurried respiration, and is much distur-
bed while asleep. There is often pain in
the head, uneasiness of the stomach, and
bowels, a white tongue, scanty, high co-
loured, and turbid urine, costive, or loose
bowels, and when loose, discharging sti-
my, or yeasty, pieces of a very offensive smell.
As might be expected the complexion at
this stage is pale, and sallow, and
the countenance languid, and sunken.

All of the symptoms enumerated will seldom or never be met with in a single case; and in some instances one or more of them will so predominate, that some other important disease may be thought to exist. Now and then we will have all the symptoms of worms, or perhaps those of *Tubis Mesentericas*. In infancy *Marasmus* may be readily confounded with the irritation from dentition, and not uncommonly with the ^{Diagnostic} symptoms of *Hydrocephalus Internus*. "The swelled, inflamed, and irritable state of the gums of infants," says Ayre, which is attributed to some natural difficulty in dentition may be considered as a symptom only, and not as it is generally thought a cause of this complaint." Concerning the strong resemblance of *Marasmus* in some instances, to *Hydroce-*

Phalus Internus, the same distinguished writer remarks "that he had been lead on a great many occasions to suspect that this fatal disease was commencing; and in two or three instances he had been induced to believe that it was actually present, and had been gratified to find by the result that he had been mistaken." "There is, in fact, says he, often considerable difficulty, especially in infancy, to determine when the symptoms proper to *Marasmus* terminate, and those belonging to *Hydrocephalus Internus* begin; and it is frequently by the result alone, that an opinion of their nature can be formed."

Notwithstanding the difficulty in some cases, of forming a correct diagnosis between these two complaints, Dr Ayre

believes that Hydrocephalus Intermittens to
a certainty exists, where the child screams
carries his hand to the head, and de-
sires to have it low, and to be pressed
between the occiput, and forehead when
there is delirium in the day, dispropor-
tioned to the fever; where there is dou-
ble vision, or blindness, and a slow in-
termittent pulse.

Pathology. Many suppose that, Strabismus
is dependant merely on a loaded, and con-
stipated state of the bowels; but this opi-
nion appears to be erroneous, and is in-
concilable with the phenomena exhibi-
ted by the disease, and with the treat-
ment found the most successful. The
symptoms are always those of a disordered
state of the chylopoietic viscera; and ~~the~~



we will find that the disease though relieved, yet can not be eradicated by the unloading of the bowels.

It is the opinion of Johnson, and of ^{Dr} Ross, that haemorrhoids depend on a deranged state of the alimentary canal, in which all of the chylificative visceræ sympathise. Dr Ross thinks the stomach may be disordered in its functions by a cause directly applied to it, and may induce derangement in the liver; or, that the stomach may become disordered by the like sympathies from a complaint in the liver. It is doubtful, as to what particular derangement of the stomach we should attribute an interruption, or irregularity in the functions of the liver. It is supposed by Ross that the tough phlegm, which is always pre-

sent in the stomach, and bowels of those
affected with Marasmus has a greater
tendency in aggravating, if not in produ-
cing it, and he thinks that this phlegm
contributes to the exciting of the disease
by its own morbid irritation, or by its
interrupting digestion; by which the
stomach is prevented from receiving that
particular stimulus which is necessary
to excite the Liver and other subordin-
ate organs to their full and proper ac-
tions. This derangement of the stomach he
thinks may communicate a morbid
and imperfect stimulus to the Liver, where
by its motion is impeded, and becomes
of an unhealthy nature: that an interrup-
tion in the accustomed action of the Liver
occasions a congestion of its vessels, and
the diminished secretion of bile gives rise



to a congestion of the *Vena Portarum*; that
the congestion of these vessels can only be
overcome by restoring the secretion, by a dis-
charge of blood, from the loaded exten-
sities of the *Vena Portarum*, or by a he-
morrhoidal flux.

Dr Chapman entertains an opinion
with respect to this disease, correspond-
ing very nearly with that of Dr Pyre.
He believes Marasmus consists in
a derangement of the alimentary ca-
nal, from a *Stomachic Diathesis*, in
which all of the chylopoietic viscera
and a part of the lymphatic system
sympathize.

The correctness of the latter opinion
is evident on a post mortem examina-
tion, which discovers the intestines
filled with vitiated feces, and a

thick mucus — the liver enlarged &
the sympathetic glands so tumefied,
and indurated, as evidently to have
interfered in a great measure with
absorption of chyle, and a proper de-
gree of nourishment to the system.

Remote Causes — The most common of
these, are cold, an improper diet, &
the impure air of crowded, or ill
ventilated situations. The fall,
from a predisposition acquired by
the previous heats of summer, is thought
to be the season, in which cold most
easily excites this disorder. One of the
most common causes of marasmus,
according to some of the most dis-
tinguished authors, is the withhold-
ing of the natural nourishment,

the milk of the mother, and loading
the infant's stomach with the most
indigestible articles of food. It may
be laid down, observes you, as an
incontrovertible fact, that during
the first six or eight months of an
infant's life, the only suitable food
for it is the milk of the mother; all
artificially prepared food, having
the strongest tendency to disorder
it, and producing, too commonly,
symptoms of a biliary derangement,
in their most marked, and fatal
form."

To support the correctness of this asser-
tion we have the authority of Hugh
Smith, who says it is a solemn truth
that almost every woman is capable of
supporting her infant; that conspiring it.



altogether to her breast will prove
of the greatest advantage both to one
and to the other; and that every
day it will grow stronger, and
at last win defy disease.

With the above mentioned causes
we may enumerate the giving of
Laudanum, and the too early
administration of aperients. The ap-
plication of tight bandages about
the abdomen, is said, to predis-
pose children to this complaint,
by compressing the parts within
the abdomen, and either interfe-
ring with their development, or
preventing them from performing
their natural functions.



Treatment $\frac{3}{4}$ No class of medicines
appears to be better suited to this
disorder, than that of Purgatives, and
of them Calomel is entitled to our
greatest degree of confidence, from
its specific action on the Liver. In
what manner this medicine acts
on the Liver has not been pre-
cisely ascertained. It has been sup-
posed by some that it affects that
organ by making an impression
on the stomach, and restoring its
secretions to their healthy state; or
by imparting to the stomach a stim-
ulus, which is communicated by
sympathy to the Liver. These supposi-
tions, hardly merit our attention; for
we will know that veratrum has the
same effects, notwithstanding.



is applied to the skin.

The use of calomel, by the advice of Dr. Chapman, should be preceded by some of the milder purgatives, but he recommends, where the disease is confirmed, that we should rely chiefly on active, and frequent purging with this article. Daily purging, he says, instead of weakening invariably invigorates the child.

Dr. Ayrer differs a little, from Dr. Chapman in the administration of calomel. The former says, that scirrhus consists in derangement of the liver, and that whatever irritation may be present in the bowels from morbid accumulations, this medicine is not usefully employed; as a purge, but that its



proper action being on the liver, medicines of a strictly purgative kind should be selected for their evacuation.

Calomel if given in a large dose, is well known to operate actively as a cathartic, and, therefore, it seems advisable that we should first employ it, as recommended by Dr. Chapman, and afterwards as is advised by Dr. Sydenham. When the patient is convalescent, & the symptoms of Biliary derangement subside in a measure, or become stationary, Mercurial frictions to the right side have been found more efficacious than an obstinate perseverance in the employment of calomel.



Emetics are seldom given in Marasmus,
unless where there is nausea, and ac-
cumulations of phlegm in the stomach.
V. S. is condemned by Johnson, as useless,
when the head is not much affected.
Some have proposed the introduction
of leeches into the rectum, to procure the
same beneficial effects, which are said
to result from a hemorrhoidal flux.
No one, however, I believe, attempts
the overcoming of the disease by adopt-
ing this practice.

Opiates are justly considered injurious;
for they are well calculated to aggra-
vate the cause of costiveness, and to inter-
fere with the operations of those medi-
cines that are given to remove it.
After the free evacuation of the bowels,
or if the patient is much debilitated

tonics will be required. Dr Chapman
speaks favorably of Bark, and the
preparations of Iron, with small do-
ses of Rhubarb to obviate costiveness.
As auxiliary means of cure, the cold
bath, warm clothing, and exercise
will be useful. But of all things
in the treatment of Marasmus, no-
thing perhaps requires more atten-
tion than the diet. Every article of
food should be easy of digestion,
and ought to be given in mode-
rate quantity so as not to oppress
the stomach, whose powers are ve-
ry imperfect.

No kind of nourishment is so good,
in the opinion of Sydenham, for infants
as the milk of the mother, and
he tells us, that he has frequently

known the infants of the poor, to per-
ish, notwithstanding every attempt
to save them, solely from their be-
ing deprived of the breasts of their
mothers. To attempt then, he says, to
relieve an infant from this disor-
der while it is deprived of its nat-
ural food, will be as fruitless, as
it must appear unnatural.

James M. Smith
of the State of New York
do hereby certify that
the within and foregoing
is a true and correct
copy of the original
as the same appears
from the records of
the said State of New York
in the office of the
Secretary of State
at Albany this 1st day
of June 1861